



## HOW TO COMPLETE THE “REQUEST FOR pH CONTROL” FORM (FOR ACIDIFIED FOODS)



This form is submitted to determine if your product is an acidified food. The purpose of this document is to assist you in completing the form “[Request for pH Control](#)”, in order to provide the University of California Laboratory for Research in Food Preservation (UCLFRP) with the best available information about your product and process. This form should be submitted once you have finalized the formulation and product name.

Please fill out a separate form for each product formula.

### **FILLING OUT THE FORM**

**Canner:** The name of the company where the product will be manufactured. This can be the name of a co-packer who will be manufacturing the product for you. If you plan to manufacture the product yourself at a commercial kitchen, but do not yet have a company name, put your own name in this box.

**Mailing Address/City/Zip Code:** Include the complete address where the ‘canner’ receives mail. The canner will be notified of the outcome of the process evaluation via letter, so it is important to provide a valid, accurate mailing address. Ideally, this would be the address where the product will be manufactured.

**Product:** The name of your product, as it will appear on the finished packaged product label.

**Formula Number/Code:** An alphanumeric code unique to this formulation of the product. For example, a Hot Pineapple Salsa might be called HPS-01. Note: if you ever change the formulation for this product, the new formula number would be changed sequentially. In the example above, the new formula for the product would be HPS-02.

**Telephone and/or E-mail address:** Sometimes, UCLFRP staff have questions during the evaluation process. Provide a telephone number and/or E-mail address where the responsible individual can be reached to answer questions. If there is an extension, please add the extension in the “XT” space.

**Type of Submission:** If the product has never been previously submitted to UCLFRP, check the “New Product” box. If the product has previously been submitted to UCLFRP, and this submittal is for a new formula number or to report changes to the container, ingredients or process, check the “Reformulation” box.

**If Reformulation, must provide:** If the product has been previously submitted to UCLFRP, what is the S number and/or date from the previous process letter?

**Sample(s) Submitted?** If no samples were submitted, check the “No” box.

If sample(s) were submitted with the form, check the “Yes” box. If the sample was made in the production facility where the product will be made for commercial production, check the “Production Sample” box. If the sample was made in a laboratory or test kitchen, check the “Laboratory Sample” box.

Samples are sometimes necessary for a complete evaluation of the product. If they are necessary, but not submitted, this may delay the review process.

**Ingredients:** Identify each ingredient used in the product. Identify the weight or percentage of each ingredient. Use consistent units of measure (ounces, pounds, grams, etc.). Describe each ingredient – fresh, frozen, dried, brined, canned, acidified, etc. If the ingredient was brined, canned or acidified, include the pH of the ingredient (if known). Attach extra sheets, if needed. For some ingredients, the Specification Sheet from your supplier may be useful.

The amount of each ingredient is a key consideration when UCLFRP is evaluating the product. Please use consistent weight or volume measurements (grams, ounces, or pounds, **or** liters, gallons, ounces, etc.). If inconsistent measurements (cups, TBSP, tsp) are used, UCLFRP will have to make calculations to determine how much of each ingredient is in the product, and this determination may have an impact on the final evaluation of the process and/or the critical factors that are determined. If you are able to calculate the percentage values accurately for each ingredient, please do so. If not, just submit the consistent weights or volumes.

**Product Preparation:** Identify the process (cold fill, pasteurizer with water bath, hot-fill-hold; other) by checking the appropriate box.

This section is where the canner explains exactly how the product will be made. How are the ingredients combined? What goes in first, second, etc.? Are the ingredients chopped, blended, cooked, peeled, etc.?

For COLD-FILLED products: please provide details of how the product is made and if it, or any component, is heated prior to filling. Also provide the fill temperature.

Are the ingredients or product heated? If so, identify the minimum time and temperature and exactly what parameters are monitored.

For products that will be heated in the container: Describe the product and how it will be cut (if applicable). For example “whole cucumbers” or “sliced cucumbers” or “speared cucumbers”. For items such as garlic, identify whether the ingredient will be whole, sliced, chopped, etc. These factors may influence acid penetration of the ingredient. If the product is a relish or the ingredients are mixed or blended, include those details. Describe how the containers will be heated and the temperature. For example: jars fully immersed in a water bath at X°F.

For HOT-FILL-HOLD products: Also include (1) the minimum temperature upon filling into the container, (2) how long the product is held in the container prior to cooling, and (3) how the container lid is sterilized (for example: is the container inverted?).

Use additional sheets, if necessary. The better information you provide regarding product preparation, the more accurate the evaluation. A flow-diagram may be a good way to explain each step.

**pH of acid ingredient(s) alone or with water (if added):** Identify the pH of all acid ingredients (such as vinegar, citric acid, lemon juice, etc.) used in the product, if known.

**Equilibrium pH after low-acid ingredients are mixed in but before any acid is added:** If known, identify the equilibrium pH after low-acid ingredients are mixed in, but before any acid is added.

**Equilibrium pH of finished product:** This is the pH of the product once all the ingredients are mixed and the pH has had time to equilibrate (the largest chunks have the same pH as the brine). If the product is a thin liquid or a homogenous product, this should be easy to determine by putting the pH probe into the product. However, if there are chunks of vegetables, you may need to measure pH of the brine separately from the chunks. You can refer to [21 Code of Federal Regulations Part 114.90](#) for information regarding how to measure pH accurately.

**Approximate time needed to achieve equilibrium pH:** For some products, equilibrium pH is reached immediately. However, for other products, especially if they are “chunky”, it may take several hours or even days to reach equilibrium pH. You should be familiar with your product and the time it takes to achieve equilibrium. This can be done by measuring pH of different samples at different times (immediately after manufacture, a few hours later, a day later, and a few days later, etc.). If the values are consistent across time, the product reached equilibrium immediately. However, if the value changes each time the product is tested, the product has not yet reached equilibrium and you need to keep testing until consistent pH values are obtained.

**For products where primary acidification is by addition of acid to a low-acid main ingredient (e.g., peppers):**

**If food is acid-blanching:** Fill in each box indicating the type of acid used; the percentage of acid in the bath; the blanch time; the blanch temperature; and the pH of the food after blanching.

**If acid-blanching is not used, how is acidification achieved?** Describe how the product is acidified. Provide as much detail as possible.

**For product with Water Activity  $\leq 0.85$ , give equilibrium Water Activity of finished product (describe method used):** Describe how the Water Activity was measured and identify the Water Activity level.

**Signature/Printed Name/Title:** The signature, title and printed name of the person who prepared the form.

**Date:** The date the form was completed.

**E-mail address (if you prefer to receive the letter electronically):** Provide the e-mail address of the person who prepared the form if you desire to receive an electronic copy of the official process letter (S-letter).

Please refer to “[Steps for Submission or Re-Submission of pH Samples \(Acidified Foods\)](#)” for additional information regarding the evaluation process.

**IMPORTANT NOTES:**

The product formulation is protected under the law. Specifically, California Health and Safety Code Section 110165 states that it is unlawful for any person to use to his own advantage, or to reveal to

any person other than to the director or officers or employees of this department, or to the courts when relevant to any judicial proceeding under this division, any information acquired under authority of this division concerning any method or process which as a trade secret is entitled to protection.

Submittal of this form is like entering into a contract. The information provided needs to be factual, and the official process determination is based upon the information provided on this form. If any changes are made to the formulation, the product needs to be re-submitted for evaluation to determine whether the official process determination has changed.